

WHAT IS CLAIMED IS:

- 1                   1.       A modular walk-through metal detector comprising:  
2                               a plurality of separate sensor panels electrically coupled to each other  
3 and arranged one above the other along two separate sides to form two side walls; and  
4                               at least one top cross-member that engages each side wall.
- 1                   2.       A metal detector in accordance with claim 1 wherein each sensor panel  
2 is interchangeable.
- 1                   3.       A metal detector in accordance with claim 1 wherein the sensor panels  
2 may be stored in the top cross member when the metal detector is disassembled.
- 1                   4.       A metal detector in accordance with claim 1 wherein the metal detector  
2 comprises six sensor panels, each side wall comprising three sensor panels.
- 1                   5.       A metal detector in accordance with claim 1 wherein each sensor panel  
2 comprises windowed areas.
- 1                   6.       A metal detector in accordance with claim 5 wherein each sensor panel  
2 comprises a weather-proof construction.
- 1                   7.       A metal detector in accordance with claim 1 wherein the metal detector  
2 further comprises at least one base member coupled to the side walls.
- 1                   8.       A modular walk-through metal detector comprising:  
2                               a base comprising at least two base members;  
3                               at least four separate and interchangeable sensor panels electrically  
4 coupled to each other and arranged above the at least two base members to form two side  
5 walls, a bottom sensor panel of each side wall being adjacent a corresponding one of the at  
6 least two base members; and  
7                               a top cross-member that engages each side wall.
- 1                   9.       A metal detector in accordance with claim 8 wherein each sensor panel  
2 comprises windowed areas.
- 1                   10.      A metal detector in accordance with claim 9 wherein each sensor panel  
2 comprises a weather-proof construction.
- 1                   11.      A metal detector in accordance with claim 8 wherein the sensor panels  
2 may be stored in the top cross-member.
- 1                   12.      A method of detecting metal, the method comprising:  
2                               providing a plurality of sensor panels;

3 providing a base comprising at least one base member;  
4 providing a top cross member;  
5 assembling two side walls each comprising at least two sensor panels  
6 such that the sensor panels are in electrical communication;  
7 coupling the side walls to the base;  
8 coupling the side walls to the top cross member to provide an  
9 assembled modular metal detector;  
10 providing power to the metal detector; and  
11 passing an object to be scanned through the metal detector.

1 13. A method in accordance with claim 12 wherein the power is provided  
2 via at least one battery.

1 14. A method in accordance with claim 12 wherein the sensor panels are  
2 provided stored in the top cross member.

1 15. A method in accordance with claim 12 wherein the power is provided  
2 with a solar power system.

1 16. A modular walk-through metal detector comprising:  
2 a base comprising at least one base member;  
3 a plurality of separate sensor panels electrically coupled to each other  
4 and arranged above the at least one base member to form two side walls, a bottom sensor  
5 panel of each side wall being adjacent the at least one base member; and  
6 a top cross-member that engages each side wall.

1 17. A metal detector in accordance with claim 16 wherein each sensor  
2 panel is interchangeable.

1 18. A metal detector in accordance with claim 16 wherein the base  
2 comprises at least two base members.

1 19. A metal detector in accordance with claim 16 wherein the metal  
2 detector comprises six sensor panels, each side wall comprising three sensor panels.

1 20. A metal detector in accordance with claim 16 wherein each sensor  
2 panel comprises windowed areas.

1 21. A metal detector in accordance with claim 20 wherein each sensor  
2 panel comprises a weather-proof construction.

1                    22.     A metal detector in accordance with claim 16 wherein the sensor  
2 panels may be stored in the top cross-member and the top cross member includes at least one  
3 handle and at least two wheels.